

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

**In the Matter of:**

Schools and Libraries Universal Service	)	CC Docket No. 02-6
Support Mechanism	)	
	)	
Comprehensive Review of Universal Service	)	WC Docket No. 05-195
Fund Management, Administration and	)	
Oversight	)	
	)	
International Comparison and Consumer	)	GN Docket No. 09-47
Survey Requirements in the Broadband Data	)	
Improvement Act	)	
	)	
A National Broadband Plan for Our Future	)	GN Docket No. 09-51
	)	
Inquiry Concerning the Deployment of	)	GN Docket No. 09-137
Advanced Telecommunications Capability to	)	
All Americans in a Reasonable and Timely	)	
Fashion, and Possible Steps to Accelerate	)	
Such Deployment Pursuant to Section 706	)	
of the Telecommunications Act of 1996, as	)	
Amended by the Broadband Data	)	
Improvement Act	)	

**COMMENTS OF THE AMERICAN LIBRARY ASSOCIATION  
IN RESPONSE TO NBP PUBLIC NOTICE # 15**

The American Library Association (ALA), the world's oldest and largest professional library association, is pleased to provide comments on this Public Notice seeking comments related to broadband access in education and possible modifications to the E-rate program for the purpose of improving broadband deployment to meet the needs of schools and libraries.

ALA is grateful for the opportunity to once again speak to the remarkable success of the E-rate program. Thousands of public libraries have applied for and received discounts on basic telecommunications and information services, and thousands more have benefited from access to advanced telecommunications services through broadband capacities that have been made available to them through the program to the extent that applicants have the funding resources to pay the non-discounted portion. In addition to the discounted services that are made available to eligible libraries and schools, E-rate has, in many cases, served as a catalyst for other broadband development in the communities where these libraries and schools exist. By taking broadband to eligible schools and libraries under the E-rate program, service providers are, in many cases, able to make the business case necessary to

provide advanced services to residential customers and others in those same and surrounding communities. Libraries' use of E-rate discounts to provide patrons with desperately needed services are consistent with the fundamental purpose of the E-rate program—to provide access to advanced telecommunications and information services on a universal basis.

## **1. BROADBAND DEPLOYMENT**

### ***(1c.) Barriers to Increased Broadband Deployment and Usage***

Libraries serve communities all across the nation. Each of these libraries plays a vital role in supporting job searches and career development, small business creation, homework and school research, access to online education, training, and access to government services and resources through its free public access terminals. Broadband connections are one of the critical elements that allow libraries to provide these essential services to the public.

### ***Increased Need for High-Capacity Bandwidth and Barriers to Meeting that Need***

With the increased use of libraries comes the need for greater bandwidth.<sup>1</sup> Currently, libraries are facing a broadband crisis due to growing demand and increasingly bandwidth intensive applications. At the same time, many libraries are faced with the following practical challenges and/or limitations in providing the necessary higher bandwidth services to meet the growing needs of their patrons:

1. Limited library funding—even with E-rate discounts—to purchase greater bandwidth where sufficient high-capacity infrastructure exists;
2. inability, in many situations, to even **obtain** the necessary bandwidth—regardless of cost—due to non-existent high-capacity infrastructure; and,
3. limited or no E-rate program participation due to program complexities and insufficient staff to manage the process.

In addition, we are concerned that the funding cap on the E-rate program will soon be reached, further limiting schools and libraries from receiving the needed financial support for fundamental telecommunications services and Internet access.

### ***Inability to Pay the Non-discount Portion of the E-rate Program***

The need for greater bandwidth means corresponding higher non-discount costs under the E-rate program. The inability to take advantage of E-rate for higher capacity solutions, where they physically exist, is often limited by the inability to identify the necessary funds to pay the non-discounted portion of the service cost. The cost associated with moving from a

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<sup>1</sup> Almost 60% of libraries report that their connectivity speed is insufficient some or all of the time. It is significant to note that essentially the same percentage of libraries report inadequate bandwidth for their public access patrons even with the reported increases in bandwidth (44.5% of libraries report connection speeds greater than 1.5Mbps, compared to 25.7% in 2007-2008). See Bertot, J.C., et al. "Libraries Connect Communities 3: Public Library Funding & Technology Access Study." American Library Association. Chicago, IL. 2009. p. 23, 42.

56kb circuit to 1.5 Mbps is one thing. Moving from 1.5 Mbps to 20 Mbps or to 100 Mbps or even to a gigabit—depending on the size and need of the library—is another. While the need for broadband capacity grows, state and local budgets do not. Some relief is needed that will allow the expansion to higher bandwidth capacities at affordable rates and, as it relates to E-rate, some realization needs to occur that even the non-discount match requirements present a steep challenge to many libraries that need to upgrade their broadband services—especially in these difficult economic times.

### ***Insufficient Infrastructure***

The bandwidth needs of libraries are growing at exponential rates. The infrastructure to support those needs is not. This is especially true in rural and other sparsely populated or remote areas.

In the past, legacy copper and other low-bandwidth infrastructure have been modified and upgraded to keep pace with lower bandwidth needs. However, as the need for capacity approaches or exceeds the capabilities of that existing infrastructure, service providers must make business decisions as to when and how the transition to high capacity infrastructure will be made. In more populated areas of the country, the transition is beginning to take place. Fiber optic networks have the potential of meeting not only today's needs, but also those of the future. But, in other areas, that transition lags behind our capacity need. Given the E-rate cycle, costs for services must typically be identified a full year in advance of actually receiving services. The need to construct infrastructure further delays the opportunity to receive services. While some general infrastructure development may occur in the next two years due to funds available through the American Recovery and Reinvestment Act; those funds, at least to date, have been focused on consumer needs. It is clear that further steps will be required to meet the intent of the 1996 Telecommunications Act to ensure universal access for libraries and schools to advanced services. Additional steps must be taken to ensure that infrastructure development to these institutions will keep pace with the higher-level needs of multi-user environments.

While we know through conversations with libraries and service providers that E-rate has often been the catalyst for service providers to upgrade and extend their networks, we also know that the business decision to construct new high-capacity infrastructure must be driven by more than the capacity needs of schools and libraries alone.

Even when that high-capacity infrastructure becomes available, the issue of affordable access to that infrastructure in terms of ongoing service and installation fees will likely remain an issue.

### ***Impact of E-rate Complexity on Broadband Services***

Our research shows that program complexity remains a major barrier preventing many libraries from participating fully in the program.<sup>2</sup> ALA is on the Commission's record urging

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<sup>2</sup> Bertot, et al., at 54.

simplification of the program, and we continue to see this as an urgent need.<sup>3</sup> We strongly encourage the Commission to make streamlining and simplifying the E-rate program part of the overall development of a national broadband plan. We look forward to working with the Commission on the design of an E-rate program that meets the needs of applicants, satisfies the mission of the program and ensures transparency and accountability. It is important to note that program complexity is often exacerbated by ongoing minor modifications to the program. In practical terms, this constant “tweaking” requires continued retraining of applicants, increases application error rates, and makes reviews and audits much more complex. With the number of applications approaching 40,000, a simpler program means faster application review, faster disbursement of funds, less chance of applicant error, and less likelihood of applicants having to repay funds—a significant risk of participation to any entity in these economic times.

### ***Impact of the Current Annual Cap on the Discounted Portion of the E-rate Program***

Without the financial support for discounted services made possible through the E-rate program, many libraries would be even further limited in meeting the challenge of paying for needed broadband services. As we grow closer to exceeding the \$2.25 billion cap on Priority One Telecommunications services and Internet Access alone, we once again urge the Commission to increase the cap on the E-rate fund. The cap was established in 1997 and has not been adjusted since, even to adjust for inflation. It is important to note that the Commission acknowledged in the 1997 *Universal Service Order*<sup>4</sup> that, without an existing program, there was no historical data upon which to accurately reflect the demand for the first year of the program. It is also important to note that the Commission stated that they did not believe the demand would exceed the cap<sup>5</sup>—at least not in the first three years of the program before the comprehensive universal service review was to take place in 2001. In January 1998, the Congressional Budget Office estimated that only \$539 million would be required in the first year of the program and that it would be 2008 before the \$2.25 billion cap would be reached.<sup>6</sup> In reality, even in the first three years of the program, funding requests (demand) exceeded the cap.<sup>7</sup>

During the twelve years of the program, demand has increased significantly for Priority One services. Given the digital nature of the world in which we live, we know that future needs will also continue to increase. Because of the constantly growing increase in needs and because of changes in application review, there are fewer funds available for Priority Two services. More importantly, ***we are fast approaching the day when the Commission will be forced to initiate a limitation on Priority One funding for eligible schools and libraries due to lack of funds to cover funding requests for these services—services***

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<sup>3</sup> See comments of the American Library Association in response to the Notice of Proposed Rulemaking, FCC Docket No. 05-195, Comprehensive Review of Universal Service Fund Management, Administration, and Oversight. October 2005.

<sup>4</sup> FCC 97-157 at par. 532

<sup>5</sup> FCC 97-157 at par. 541

<sup>6</sup> Congressional Budget Office, “Federal Subsidies of Advanced Telecommunications for Schools, Libraries, and Health Care Providers.” January 1998.

<http://www.cbo.gov/showdoc.cfm?index=314&sequence=0&from=1>

<sup>7</sup> Subsequently, due to requests that could not be funded, additional applications were processed beyond those received in the application window.

***that impact every aspect of the nation's libraries and schools.***<sup>8</sup> Expanding the E-rate program for additional uses and users beyond the program's original intent will further exacerbate this issue. Exploring further options for the use of this Fund is more appropriate at a time when the existing needs of schools and libraries have been met. We ask the Commission to increase the cap on the E-rate fund to support the evolving needs of libraries and schools within the original intent of the program—universal access to advanced telecommunications and information services.

#### **4. DIGITAL LITERACY**

***(4a.) Use of digital literacy training to improve access and use of online systems and the educational, social, or economic impact created by such work.***

The term “digital literacy” describes a subset of the larger concept of “information literacy.” Information literacy encompasses a full range of capabilities required to successfully navigate analog as well as Internet resources. The public library plays an increasingly integral role in ensuring the digital literacy of adult and youth populations. For the 35% of U.S. households that report they have no Internet access, the public library represents an absolutely essential link to connect users to the information they need. Library staffs serve as a critical link in closing the digital divide in vulnerable adult populations by providing both formal and informal (often at point of need) information literacy and technology training. Training can include helping patrons open an email account, creating a budget spreadsheet, developing a résumé, and teaching basic Internet skills. Ninety percent of libraries offer formal technology classes or informal assistance for patrons using library computers. Twenty-seven percent of libraries that offer formal training report that they provide classes in accessing online employment related information. In high-poverty areas, 97% of libraries offer classes in basic computer competencies, including mouse and keyboard skills, and general software use skills. Ongoing adult technology training at the public library can help users keep pace with 21<sup>st</sup> century digital literacy skills.

When nearly 4 million job vacancies are listed online and more than half of the top one hundred U.S. retailers require applicants to complete job applications online, the socio-economic repercussions of basic information literacy reach a critical level.<sup>9</sup> Libraries are the place in the community where people can turn when barriers prevent them from having any (or inadequate) access at home.

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<sup>8</sup> The Commission's priority rules for the E-rate program provide that first priority for the available funding for all discount categories shall be given to requests for telecommunications services and Internet access (Priority 1 services). 47 C.F.R. § 54.507(g)(1)(i). The remaining funds are allocated to requests for support for internal connections (Priority 2 services), beginning with the most economically disadvantaged schools and libraries, as determined by the schools and libraries discount matrix. 47 C.F.R. § 54.507(g)(1)(ii); *see also* 47 C.F.R. § 54.505(c).

<sup>9</sup> The Conference Board, “Online Job Demand Down 83,200 in October, The Conference Board Reports.” November 2, 2009. See <http://www.conference-board.org/economics/helpwantedOnline.cfm> and Taleo Research, “Trends in Hourly Job Application Methods.” 2006. See [http://www.ala.org/ala/research/initiatives/plftas/issuesbriefs/JobBrief2009\\_2F.pdf](http://www.ala.org/ala/research/initiatives/plftas/issuesbriefs/JobBrief2009_2F.pdf).

Ninety-six percent of school districts polled by the National School Boards Association have teachers who assign homework that requires use of the Internet.<sup>10</sup> Most students have some limited access to the Internet during school hours, but oftentimes do not have enough time to complete their assignments. Specifically, the public library acts a bridge from the classroom to home for many K-12 students. After school hours are often reported as the busiest at the public library. Overall, 90% of public libraries offer subscription databases at no cost to their patrons; 80% have homework help resources; 63% have digital or virtual reference; and 43% offer online tutorials.<sup>11</sup> About half of all teens have gone online from a library, and more than one-third of teenagers who visited the public library in the last year said they went to the library to use the library Web site for information and research.<sup>12</sup>

The majority of technology training at schools happens in the school library. Here, state-certified school librarians provide K-12 students with vetted resources (e.g., subscription-based online databases, course packs that adhere to district education standards) and hands-on technology training ranging from basic mouse skills to completing advanced Web searches. The American Association of School Librarians produced *Standards for the 21<sup>st</sup> Century Learner* and a companion, *Standards for the 21<sup>st</sup> Century Learner in Action* that provides guidelines and implementation strategies for incorporating the standards in the library classroom.<sup>13</sup> State-certified school librarians report they collaborate with teachers to develop a curriculum that includes individual instruction in how to use the school's online resources. One school librarian in a suburban high school reported between 600 and 700 students visit the library each day. About 200 students visit the library during their lunch period to use the computers for checking email as well as completing assignments. Students at this high school have 24/7 access to the library's subscription databases, video tutorials, and online homework packs through the library's website. Today's school librarian is responsible for making sure students have access to quality online resources. Furthermore, school librarians provide direct instruction on research and information literacy skills.

## **E-RATE MODIFICATIONS—Observations and Recommendations**

In addressing the Commission's questions about possible modifications to the E-rate program, we feel it is important to revisit the intent of Congress, the recommendations of the Federal-State Joint Board, and the prior work of the Commission in developing the *Universal Service Order*<sup>14</sup>—the framework for implementation of the E-rate program. The foresight of these three bodies—Congress, the Joint Board, and the Commission—has served libraries and schools well in the past twelve years, and will continue to do so in the future.

Congress, in its 1996 Telecommunications Act conference report, recognized the importance of telecommunications and related services for schools and libraries when it enacted the 1996 Act.

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<sup>10</sup> American Library Association, "Supporting Learners in U.S. Public Libraries," 2009. See <http://www.ala.org/ala/research/initiatives/plftas/issuesbriefs/EducationBrief2009.pdf>.

<sup>11</sup> Ibid.

<sup>12</sup> Ibid.

<sup>13</sup> American Library Association, "Standards for the 21<sup>st</sup> Century Learner." See <http://www.ala.org/ala/mgrps/divs/aasl/guidelinesandstandards/learningstandards/standards.cfm>.

<sup>14</sup> FCC 97-157.

“The provisions of subsection [254] (h) will help open new worlds of knowledge, learning and education to all Americans -- rich and poor, rural and urban. They are intended, for example, to provide the ability to browse library collections, review the collections of museums, or find new information on the treatment of illness, to Americans everywhere *via schools and libraries*. This *universal access* will assure that no one is barred from benefiting from the power of the Information Age.”<sup>15</sup>

Further, as recognized by the FCC in its *Universal Service Order*,<sup>16</sup> Congress stated that “[t]he ability of K-12 classrooms, [and] libraries . . . to obtain *access to advanced telecommunications services is critical to ensuring that these services are available on a universal basis*.”<sup>17</sup>

After passage of the 1996 Telecommunications Act, the Commission appointed the Federal-State Joint Board on Universal Service<sup>18</sup> to implement the universal service directives of the Act. Former Chairman Reed E. Hundt, former Commissioner Susan Ness and former Commissioner Andrew C. Barrett were initially appointed to serve along with several state-level Commissioners. In a separate statement to the Order appointing the Joint Board, Commissioner Barrett said the following:

“Clearly, by enacting the 1996 Act, the Congress recognized several complex, consequential changes in the communications industry.... Indeed, such changes are fully acknowledged and reflected in the new universal service provisions of the 1996 Act. The 1996 Act requires the Commission to ensure that the definition of services supported by universal service support mechanisms and those mechanisms themselves *evolve as advances in telecommunications continue to occur*.”<sup>19</sup>

Former FCC Chairman Hundt recognized in his speech entitled “Yesterday, Today, and Tomorrow”—presented to FCC staff in May 1997 during the same time period as the adoption of the Commission’s *Universal Service Order*<sup>20</sup>—that the public interest was being fostered, in part, by establishing what would later become known as the E-rate program:

“We have guaranteed universal access to the information highway. *On its own, the market won’t ensure that all schools, libraries, and rural hospitals have access to the opportunity-rich information highway*. Thanks to the leadership of President Clinton, Vice President Gore, the untiring efforts of Senators Snowe, Rockefeller, Exxon, Kerry, Hollings, Congressman Markey, Secretary of Education Riley, the Communications Act for the first time explicitly addresses this public interest need.”<sup>21</sup>

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<sup>15</sup> 1996 Telecommunications Act Conference Report at 132-133 (emphasis added).

<sup>16</sup> FCC 97-157 at par. 429.

<sup>17</sup> 1996 Telecommunications Act Conference Report at 132 (emphasis added).

<sup>18</sup> Notice of Proposed Rulemaking and Order Establishing Joint Board, FCC 96-93.

<sup>19</sup> Notice of Proposed Rulemaking and Order Establishing Joint Board, FCC 96-93, separate statement of Commissioner Andrew C. Barrett (emphasis added).

<sup>20</sup> FCC 97-157.

<sup>21</sup> Speech transcript available at <http://www.fcc.gov/Speeches/Hundt/spreh726.html> (emphasis added).

This history helps us to understand the Congressional directives, the appreciation of the need for universal service support mechanisms to evolve, and the focus on schools and libraries as critical components to advance universal access.

***Effectively Meeting the Needs of Library and School Applicants and E-rate as a Vehicle to Stimulate Adoption of Broadband throughout Communities***

The E-rate program remains essential in fostering universal service access by ensuring that support is available for the nation's libraries and schools. We believe that the program—in its current form—will continue to act as a catalyst to stimulate the adoption of broadband services in many communities.

There were good reasons for Congress, the Joint Board, and the FCC to provide this specific framework for dealing with local and/or geographic differences, evolving needs, and evolving technologies. For purposes of this discussion regarding possible modifications to the E-rate program, we identify the following underlying positions as hallmarks of the program that comprise the program's essential framework and which should not be altered:

**1. The fundamental role that schools, libraries and rural health care providers play in providing universal access to advanced telecommunications services.**

“New subsection (h) of section 254 is intended to ensure that health care providers for rural areas, elementary and secondary school classrooms, and libraries have affordable access to modern telecommunications services that will enable them to provide medical and educational services to all Parts of the Nation.”<sup>22</sup>

“The ability of K–12 classrooms, libraries and rural health care providers to obtain access to advanced telecommunications services is critical to ensuring that these services are available on a universal basis. The provisions of subsection (h) will help open new worlds of knowledge, learning and education to all Americans—rich and poor, rural and urban. They are intended, for example, to provide the ability to browse library collections, review the collections of museums, or find new information on the treatment of an illness, to Americans everywhere via schools and libraries. This universal access will assure that no one is barred from benefiting from the power of the Information Age.”<sup>23</sup>

**2. There is *not* a “one-size fits all” solution. Developing a single set of national priorities to meet local needs would inappropriately substitute the Commission’s judgment for that of school and library administrators. There was further recognition given to the following: a) needs differ among institutions, b) there are advantages and disadvantages to certain technologies depending on intended uses, and c) readiness to implement technologies and prior investment are**

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<sup>22</sup> 1996 Telecommunications Act Conference Report at 132.

<sup>23</sup> 1996 Telecommunications Act Conference Report at 132-133.



**important local factors to be considered when determining the most effective and efficient solutions.**

“As the Joint Board recognized, the establishment of a single set of priorities for all schools and libraries would substitute [their] judgment for that of individual school [and library] administrators throughout the nation, preventing some schools and libraries from using the services that they find to be the most efficient and effective means for providing the educational applications they seek to secure. Given the varying needs and preferences of different schools and libraries and the relative advantages and disadvantages of different technologies, we agree with the Joint Board that individual schools and libraries are in the best position to evaluate the relative costs and benefits of different services and technologies. We also agree...that our actions should not disadvantage schools and libraries in states that have already aggressively invested in telecommunications technologies in their state schools and libraries. Because we will require schools and libraries to pay a portion of the costs of the services they select, we agree with the Joint Board that...allowing schools and libraries to choose the services for which they will receive discounts is most likely to maximize the value to them of universal service support and to minimize inefficient uses of services.”<sup>24</sup>

**3. Adopting the principle to support technology-neutral solutions allows for schools and libraries to take advantage of evolving and available technologies depending on local factors.**

“We conclude...that schools, school districts, and libraries are in the best position and should, therefore, be empowered to make their own decisions regarding which technologies would best accommodate their needs...and how to best integrate these new opportunities into their curriculum. Moreover, a situation in which certain technologies were favored over others would violate the overall principle of competitive neutrality adopted for purposes of section 254.”<sup>25</sup>

**4. Technological needs of libraries and schools evolve over time and that such evolution should not be hampered by the need to wait for the completion of a proceeding by the Commission.**

“As the Joint Board observed, permitting schools and libraries full flexibility to choose among telecommunications services also eliminates the potential risk that new technologies will remain unavailable to schools and libraries until the Commission has completed a subsequent proceeding to review evolving technological needs. Thus, in an environment of rapidly changing and improving technologies, empowering schools and libraries, regardless of wealth and location, to choose the telecommunications services they will use as tools for educating their students will enable them to use and teach students to use state-of-the-art telecommunications technologies as those technologies become available.”<sup>26</sup>

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<sup>24</sup> Universal Service Order, FCC 97-157 at par. 432.

<sup>25</sup> FCC 97-157 at par. 457.

<sup>26</sup> Recommended Decision, 12 FCC Rcd at 322-23.

One reason for E-rate's success is the program's inherent flexibility. Libraries are local institutions; they are products of their communities and reflect community needs and wishes. As a result, it is essential that E-rate continue to allow local libraries to define their communities' needs and apply for the appropriate level of connectivity. For example, it would be nearly impossible to set an appropriate minimum connectivity level for public libraries. Capacity, (i.e., bandwidth) is a moving target, especially as libraries strive to provide access to an expanding list of online applications, communication tools, and government services. ALA strongly cautions against this Commission defining minimum school or library connectivity levels or taking other steps to insert their decision-making for that of local entities.

Given that the existing E-rate program already allows the required flexibility to adapt as necessary to local need and the selection of effective and efficient solutions, we do not believe that the program should be modified at this time. The creation of artificial floors or ceilings to benefit one applicant over another is unnecessary.

**The E-rate program, as originally structured, remains critical to schools and libraries and the concept of universal access. It is essential that schools and libraries be given the opportunity to access affordable advanced services where such services exist today. However, it is difficult to use the program to access advanced services where those services do not exist.**

### ***Steps that can be Taken to Support Funding and Infrastructure***

There are steps that can and should be taken to ensure that both sufficient funds and sufficient infrastructure exist to support the existing and the evolving needs of libraries and schools.

1. Raise the cap on the fund, as previously discussed, to ensure that, at a minimum, funds exist to support requests for advanced telecommunications and information services as intended, and
2. Take the necessary steps to ensure that sufficient high-capacity broadband infrastructure is being deployed where necessary to ensure that the full promise of the E-rate program—the ability for all libraries and schools to have universal access advanced telecommunications and information services—can be met.

### ***Raise the Cap***

The required funds necessary to support the Congressional intent of the E-rate program were severely underestimated. Immediate steps should be taken to increase the size of the fund to meet the intent of the program. While demand information exists for the twelve years of the program, it should be noted that current program demand does not provide an accurate representation of need. Many eligible entities do not participate due to program complexity or specific requirements. Other entities have ceased filing for certain services given the knowledge that funds are unavailable for their requests. After steps have been

taken to size the fund to meet current needs, additional consideration should be given to ways in which future needs of schools and libraries can also be met.

***Require Providers to Connect Their Networks to Schools and Libraries at Speeds that Support Access to Advanced Services***

While much of the intent of Congress is being carried out to assure that universal access for schools and libraries is achieved where sufficient infrastructure exists, we ask the Commission to take the necessary steps to complete this congressionally-mandated requirement. With regard to access to advanced telecommunications and information services, Congress required the Commission in 254(h)(2)(B) to establish rules to:

“define the circumstances under which a telecommunications carrier may be required to connect its network to such public institutional telecommunications users.”<sup>27</sup>

Public institutional users were defined as public and nonprofit elementary and secondary school classrooms, health care providers, and libraries.

In 1997, the Commission declined to take this additional step, saying “[t]he Joint Board concluded that its recommendations for providing universal service support under section 254(h) would significantly increase the availability and deployment of telecommunications and information services for school classrooms and libraries, and ***found that additional steps were not needed to meet Congress's goal of enhancing access to advanced telecommunications and information services.***”<sup>28</sup>

It is time to revisit this requirement given that advanced services are not yet available on a universal basis to schools and libraries twelve years after the enactment of the Act. The Commission also acknowledged at the time of the *Universal Service Order*<sup>29</sup> that the Section 706 proceeding was, in part, to “utiliz[e]...methods that remove barriers to infrastructure investment,”<sup>30</sup> and would be forthcoming. The Commission also indicated and that the proceedings would “complement the goal of widespread availability of advanced telecommunications services.”<sup>31</sup>

Section 706 of the Act required that the Commission “initiate and complete regular inquiries to determine whether advanced telecommunications capability, particularly to schools and classrooms, [was] being deployed in a reasonable and timely fashion.” Further, the Act indicated that “[i]f the Commission [were to] make a negative determination, it [was] required to take immediate action to accelerate deployment.”<sup>32</sup>

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<sup>27</sup> FCC 97-157 at 587.

<sup>28</sup> FCC 97-157 at par. 588 (emphasis added).

<sup>29</sup> FCC 97-157.

<sup>30</sup> FCC 97-157 at par. 601.

<sup>31</sup> FCC 97-157 at par. 604.

<sup>32</sup> 1996 Telecom Act Conference Report at 102.

In the context of ensuring that advanced telecommunications capability<sup>33</sup> is available for the entities that were identified to advance universal access under the E-rate program, it is time to take the necessary steps intended by Congress to ensure that such infrastructure exists. In many areas of the country, the multi-user environments of schools and libraries are severely outpacing the capacity of available infrastructure. The infrastructure required to support the bandwidth needs of these institutions should not be defined in the same way as that of residential users.

As the national broadband plan is being developed, it is important to recognize that the adopted recommendations of the Joint Board have **not** been sufficient to ensure universal access to advanced services for schools and libraries. It is time to revisit the Commission's decision that further steps were not needed. In order to meet both the objectives of universal access for schools and libraries and to further broadband services for the public at large, the Commission should consider actions that would bring about those outcomes. ***By taking steps that would require service providers to connect their networks to schools and libraries at speeds that support access to advanced services, the infrastructure required to further the national plan for broadband services would also be advanced.***

If requirements were put in place to ensure that sufficient infrastructure was made available for the multi-user environments of schools and libraries, that same infrastructure could likely be further extended into the community at a more reasonable cost. By carrying out the statutory requirements to require that networks are sufficient to provide advanced services to schools and libraries, additional solutions for broadband services to the broader community would be advanced.

The work of the Commission and the U.S. Department of Commerce to produce and maintain a national broadband inventory map should be helpful in identifying where sufficient infrastructure exists that is capable of providing advanced services to schools and libraries on the universal basis that was intended. Perhaps more importantly, it will help to inform where sufficient infrastructure to support this purpose does **not** exist. This inventory map could provide and/or supplement the information needed to move forward with this requirement.

While E-rate has done much to support access to services where they exist, additional steps may be required to incentivize other needed infrastructure development. It is unclear at this time pending the release of grant awards through the current Broadband Technology Opportunities Program (BTOP) and the Broadband Improvement Program (BIP) what, if any, additional infrastructure will exist such that schools and libraries are able to purchase "commercially available telecommunications services."

It should be noted that requests for funding in Round 1 of the BTOP/BIP grant infrastructure program were approximately seven times greater than the funds available.

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<sup>33</sup>1996 Telecom Act Conference Report at 102. Advanced telecommunications capability was defined "without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology."

Round 2 of the grant program to seek additional funding requests for infrastructure development has not yet been initiated. It is becoming clear that the BTOP/BIP grant programs will only scratch the surface in beginning to fulfill the national need.

### ***Affordable Access—The Concept of Preferential Rates for Eligible Schools and Libraries***

In order to ensure that rates for advanced services are affordable for libraries and schools, further steps should be taken to clarify the basis upon which services at preferential rates could be made available. The Commission identified in the *Universal Service Order*<sup>34</sup> that schools and libraries (and other eligible members of consortia) were qualified to secure prices below tariffed rates.<sup>35</sup> It would be helpful for libraries and schools to understand how the requirements set by Congress to allow preferential rates could or should be carried out as it may now relate to non-tariffed broadband or advanced services.

## **11. E-RATE MODIFICATIONS—Responses to Specific Questions**

### ***(11a.) Broadband Services Currently Being Purchased***

The services that eligible entities are buying today do not necessarily meet their needs. A recent study showed that 59.6% of libraries report their connectivity speed is inadequate some or all of the time to meet patrons' needs.<sup>36</sup> It is also important to understand that the requests of one applicant cannot be compared with those of another—the program allows applicants to file as individual libraries or schools, as library systems or school districts, and through other local, regional or statewide consortia.

### ***Percentage of Priority One Services being used for basic telephone vs. broadband services***

Assistance to support all commercially available telecommunications services remains essential—especially to smaller libraries. Continued E-rate support for basic telephone services is important. E-rate support also serves another purpose related to obtaining higher capacity. In an effort to encourage participation in an otherwise complex program, we often suggest that library applicants begin with requests for basic telephone services. Doing so seeks to provide some level of confidence in the E-rate process. Many of the hurdles that are problematic to libraries (such as the requirements to comply with the Children's Internet Protection Act (CIPA), the timing issues related to the creation and approval of technology plans, and the need for complex procurement processes including RFP development and the preparation of contracts) do not exist in relation to requests for basic telephone services.

Data does not exist that would allow us to identify how support for the telecommunications category of service is broken down, nor do we feel there is great benefit to doing so. In general, we understand from applicants that the requests for basic telephone service are not increasing in the same way as that of other telecommunications services.

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<sup>34</sup> FCC 97-157.

<sup>35</sup> FCC 97-157 at par. 483.

<sup>36</sup> Bertot, et al. at 44.

### ***Usefulness of Segmenting the Specific Characteristics of Higher Capacity Broadband Users***

Because we strongly support the fundamental principles of the program set out above, we believe that segmenting the applicant community for the possible implied purpose of limiting funding support to some but not others is inconsistent with both the intent of Congress and the recommendations of the Joint Board. Rather, identifying where sufficient infrastructure exists—or doesn't exist—would better inform steps that need to be taken to ensure that eligible entities are able to purchase advanced services under the E-rate program.

#### ***(11b.) Technology Plans***

See comments on technology plans in response to Question 11(g).

#### ***(11c.) Maximizing the Use of Broadband Connections***

Allowing preferential rates may be a key component of extending the power of the Universal Service Fund under the E-rate program. The concept of preferential rates needs to be updated to allow its application to non-tariffed broadband services. Both Congress and the Commission took steps to ensure that lower rates could be offered to consortia consisting of eligible schools and libraries, eligible health care providers, state schools and universities, educational broadcasters and state and local governments. The preferential rates would benefit all members of the consortia, but only those eligible schools and libraries would receive discounts under the E-rate program. Aggregating demand in this way was thought to a) provide the benefit of extending the use of the fund due to lower pre-discount rates for eligible schools and libraries b) provide aggregated buying power for the purpose of attracting competition, and c) provide beneficial pre-discount rates to other eligible members of consortia even though they are not eligible for E-rate discounts.

The concept remains sound, but there are other steps that are needed to ensure that this concept can be put to use. Today, the current complexities associated with filing consortia applications can be overwhelming for even the most seasoned E-rate applicant. This is due to requirements to identify only the cost of E-rate eligible products and services for the purpose of identifying “price as primary factor” in awarding bids, along with requirements to document cost allocation for non E-rate eligible members of consortia, and the further complexity of ensuring accurate invoices and discount percentages are only applied on particular services. There is also heightened risk associated with consortia applications. Errors made on consortia-level applications—whether they occur within technology plans, procurement and vendor selection, Letters of Agency, Forms 479 documenting CIPA compliance, etc.—can mean that **every E-rate eligible member of the consortia could be denied funding or negatively impacted by the requirement to repay funds.** Many consortia leaders are no longer willing to risk filing on behalf of member entities. Given that large consortia applications are generally based on multi-year contracts, the risk is also likely to be associated with multiple years of funding. Given the current economic climate, entities are just not able to take the risk of having to repay multiple years worth of E-rate disbursements. Recent audits that extended far beyond program compliance requirements have caused applicants to rethink their participation in consortia.

***(11d.) Further Expanding the Class of Entities Eligible to Receive Services or the Services Eligible for Funding***

Program funds are not sufficient to meet the existing and evolving needs of those entities currently eligible to receive services. The current focus should be on increasing the size of the fund—unchanged since 1997—to support the cost of those services currently eligible and to identify other ways in which necessary capital investments associated with insufficient infrastructure can be met. Until the existing statutory purpose of universal library and school access to advanced telecommunications and information services can be achieved, we do not support the expansion of eligible services or any changes that would expand the classes of eligible entities until such time that the needs of schools and libraries can be met.

We also note that the Commission's questions in 11(d) indicate that the statute currently limits E-rate support to elementary schools and secondary schools. However, we remind the Commission that libraries are also eligible (under the statute) and that services provided by libraries across the country are essential for the purpose of providing both access to services and support for general public use.

***(11e.) E-rate program support for computers and training***

Until the original intent of the program is met, we do not support further expansion of eligible services to include such things as end-user computers or staff development. From a policy perspective, expanding the current services eligible for support would mean that even fewer funds would be available to support universal access by schools and libraries—the intent of this program.

***(11f.) Building or Purchasing Wide Area Networks (WANs)***

The Commission previously determined that “from a legal perspective,”<sup>37</sup> wide area networks purchased by schools and libraries do not meet the definition of services eligible for support under the universal service discount program. If that is the case, we assume the legal analysis has not changed and that the Commission still does not have the authority to make such modifications through rules.

The same issues exist today as when the Commission initially issued rules prohibiting the use of universal service support to build or purchase WANs. While doing so would likely meet the needs of some local entities, it is counter-productive in terms of advancing broadband deployment. The Commission previously concluded that the building and purchasing of a wide area network is not a telecommunications service because “telecommunications service” is intended to encompass only telecommunications provided on a common carrier basis. Furthermore, while WAN services are also allowed for Internet access, those services are limited to basic conduit access to the Internet. By limiting the use of funds to commercially available telecommunications services provided by eligible telecommunications providers, and to WAN services supporting basic conduit access to the Internet, support remains focused on shared facilities. In the case of telecommunications services, the

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<sup>37</sup> FCC 97-420 at 193.

requirement to share the public infrastructure facilities of service providers seems fundamental to the effort to expand and enhance broadband services.

***(11g.) Rules and Policies That Have the Effect of Deterring (Successful) Requests for Broadband Funding***

You will note that we included the word “successful” in the Commission’s question. On a practical basis, it isn’t just **requests** for funding that are deterred due to rules and policies; it is the inability to **receive funding** that negatively impacts broadband and other services.

We commend the efforts of the Universal Service Administrative Company (USAC) in processing close to 40,000 applications every year. However, we point out that it is often the subtleties of program requirements that can keep applicants from receiving funding. Consideration must be given to the fact that applying for E-rate and tracking continual minor changes in rule interpretations is not reasonable for most library and school personnel. We appreciate the fiduciary responsibility of the FCC in administering the fund and recognize that accountability is an important factor in doing so. There are ways to streamline E-rate to ensure that applicants can be successful and to meet the intent of the program.

Some specific examples of application deterrents are listed below. We also point the Commission to our comments on file on these and other specific matters.

- CIPA: As the Commission recognized in its questions, CIPA requirements do remain a deterrent to libraries seeking requests for support. A recent study showed that 21.7% of libraries did not apply in 2008 because of the need to comply with CIPA’s filtering requirements.<sup>38</sup>
- Inequities in Discount Calculations: See our response about needed changes to the methodology for calculating library discounts in 12(b.) below.
- Technology planning documentation requirements. While we agree that technology plans are an important tool to ensure that useful and cost effective implementation of technology occurs, this is an exercise that is best monitored and managed at the state level. State Libraries and State Departments of Education set timelines and standards for technology planning to meet the intended outcomes of their organizations and integrate those requirements into other functions of their agencies. It is important to note that these technology planning timelines and requirements differ from state to state, reflecting more localized needs. This local context is lost in the technology-planning requirement for E-rate—the cookie-cutter approach the program encourages allows applicants to jump through the hoops of the program, but produces a plan that often has little value. In the end, the E-rate technology plan requirement does little practical good and can actually do harm—an applicant can be denied if plans aren’t written at a certain time, don’t include the most basic of services (including such items as basic telephone and voicemail services), aren’t

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<sup>38</sup> Bertot, et al., at 54.



written and approved by a certain date, and aren't updated according to program requirements. We further point to the fact that those services that were considered "basic" for the purpose of the program in 1997 are not the same services that are considered basic today. Surely access to the Internet today could be considered as basic as local and long distance telephone services were in 1997.

We challenge the Commission to more carefully analyze the purpose of technology plans and the role of state and local decision makers in their creation, implementation, and approval. **Simply stated, it is our position that the Commission should not be involved in shaping the process of technology planning on the local, regional or state level.** Although libraries have many different methods for approaching technology planning, rarely will you find specific pieces of equipment identified in such a strategic document as a technology plan—instead, this is the purpose of a request for proposal and bidding process. The intended purpose of technology plans is to determine how technology can impact certain desired outcomes. Today's E-rate technology plan requirements have little to do with this purpose; rather, it has become a way in which to check whether a particular E-rate eligible product or service is identified in the technology plan and then on the Form 470 and subsequent Form 471. We believe that this must be rectified.

***(11h.) Comments on These Ideas (Questions) and Suggestions for Changing E-rate Eligibility to Improve Broadband Deployment***

What is needed is the follow up intended by Congress to ensure that deployment of **infrastructure** is being stimulated through regulatory or other changes. In addition, changes to the high cost fund or the development of other new funding mechanisms that support infrastructure development would mean that libraries and schools could take full advantage of the E-rate fund to request needed advanced telecommunications and information services.

**12. E-RATE DISBURSEMENTS AND DISCOUNT METHODOLOGIES**

***(12a.) Creation of New Priority Levels to Allow Entities to "catch up" or Focusing E-rate Support for Certain Entities***

The hallmarks of the E-rate program, which were outlined earlier in this response, serve the program well. To that end, we don't believe that fundamental changes to the program are needed. Flexibility is inherent in the program design to deal with evolving needs and evolving technologies. The issues associated with proposals to advance one entity over another are complex. Furthermore, setting "levels" of service for the purpose of advancing services for some would also be fraught with problems. Attempts to alter funding support by establishing technology floors or ceilings could retard development—not advance it. The reasons why entities may not be receiving a particular service are generally more complex than simply cost of that service. Even if it were reasonable to set technology floors for the purpose of providing service, school and library needs are advancing faster than the E-rate program can validate whether applicants met certain criteria to receive targeted support.

Establishing a review process for determining the validity of requests to achieve certain capacity benchmarks would only aggravate the challenges to the program.

Focusing on ideas that may allow all eligible entities the opportunity to advance as needs dictate are more likely to have significant impact. Incentivizing infrastructure development through either a separate capital fund or through other support mechanisms is a key component of a national broadband plan solution. While E-rate can continue to support library and school requests for “services,” the statute does not permit and the Commission’s rules do not generally allow for using these funds to support the cost of infrastructure development.

***(12b.) Recalculating Discount Percentages [for schools] Based on Whether “an entity lacks broadband services” and Changing Support for Internal Connections***

Even though the question about changing discount rates is only asked in the context of schools, we assume that this question is also directed to libraries whose discounts are currently based both on the discount of the school district in which the library is located and the urban/rural location of the library. We remind the Commission that the current methodology to determine poverty levels for libraries makes inaccurate assumptions about the “service area” of the library. Requiring libraries to use discounts based on an entire school district does not accurately reflect the poverty level of the community in which the library is located. The current discount methodology required for libraries does not produce the same discount as that of a school **for the same service in the same community.**

***Changing the Discount for Those Who Lack Broadband Services***

There are various reasons why libraries and schools lack “broadband” services. While cost of services may be a factor, applying specific discounts for specific services for specific entities would pose significant administrative challenges. Taking such an approach when services are bound to change each year (as needs and technologies evolve) would provide even more application complexities for applicants. Taking such an approach would likely require entities to defend during the application review process how and why they lack “broadband services.”

In addition, changing the discount level when an entity lacks “broadband services” could be based on inaccurate assumptions that a higher discount level will support the provision of services that may not be available.

We also remind the Commission that libraries and schools are multi-user environments of varying size. Residential or other one-size-fits-all definitions of “broadband services” are not appropriate. Further, questions exist as to whether generic “broadband” service definitions would be measured at the building demarcation, at the computer workstation or end-user device, or in some other fashion.

***(12d.) If the Commission established a national broadband goal for schools or libraries, what effect would that have on demand for E-rate funding?***

The answer is “likely none”—especially if the infrastructure does not exist or if services are not affordable. In order to effect change, focus **must** be redirected to these two issues.

More progress would be made by ensuring that the necessary high capacity infrastructure **exists** for schools and libraries. Supporting incentives to provide high-capacity infrastructure investment and development (such as the deployment of fiber optics or other high-capacity solutions) to libraries and schools is what is needed to ensure that the universal access requirements of the Act are met. Continuing to support legacy infrastructure that does not support the high capacity need of schools and libraries is not a positive path forward. If or when assistance is provided for infrastructure investment, the Commission should take steps to ensure that the service costs related to such infrastructure would be reduced.

***(12e.) We seek comment on these issues as well as other ideas to modify E-rate disbursements and discounts to maximize the deployment of broadband***

We’re not certain how modifying disbursements would maximize “deployment.” However, program complexity would be significantly reduced by allowing payment to be returned directly to applicants rather than going through the additional step of passing the money to service providers, who then distribute the money to applicants. Especially in those situations where applicants have paid the entire cost of service up front, reimbursements made directly to the applicant would ease the time and energy associated with receiving the benefit of discounts.

## **E-RATE FUNDING**

### ***13. Implications of Modifying E-rate Funding to Support “Additional Broadband Deployment”***

***(13a.) To what extent does the annual E-rate funding cap of \$2.25 billion limit the extent of broadband deployment by eligible schools and libraries?***

Raising the cap is essential to pay for the ongoing cost of evolving advanced service needs. The fund was sized 12 years ago based on assumptions that only ¼ of eligible schools and libraries would receive T1s. That cost was estimated to be \$525 million. Today we know that the combined cost of telecommunications services and Internet access alone are close to exceeding the funding cap. Without additional support to purchase services, schools and libraries will remain impaired in their abilities to meet the needs of students and patrons.

#### ***Programmatic Implications of Increasing the Cap to Fund Additional Services Not Currently Covered by E-rate?***

If the cap is increased for the purpose of funding additional services not currently covered by E-rate, the original intent of the program will not be met. Again, this is supported by the fact that we are very close to reaching the cap today just for Priority One service requests.

***What are the implications of indexing the cap to inflation? Would there be specific implementation issues that would arise related to such changes?***

We believe the need for increasing the cap is greater than the rate of inflation alone. When the fund was sized 12 years ago it was likely impossible to understand the future requirements that would exist and the rate at which additional services would be needed.

Increasing the fund size simply based on inflation does not take into account the increased needs of users over the last twelve years. The fund needs to be adjusted based on the **needs** of libraries and schools as well as being adjusted for inflation. Also see our earlier comments on this issue.

***(12b.) To the extent the Commission modifies its E-rate rules to encourage additional requests for funding for broadband services under priority 1, how would that change likely impact the availability of funding for priority 2 services?***

First, current rules already allow for additional requests for advanced telecommunications and information services—at least to the extent that funds will support requests. Second, schools and libraries are already close to exceeding the cap for Priority One services. In order to also pay for costs of supporting Priority Two services, further additional funds would be required. In addition, a source of support for capital investment in sufficient infrastructure capable of providing needed services is also necessary.

***(12d.) Reducing Discounts for Basic Telecommunications***

See previous response in Question 11(a.)

***(12e.) Impact of Eliminating Some Services Currently Eligible and Expanding Eligibility to Other Services***

There are no limits today—other than identification of need (a bona fide request) and the ability to pay the non-discount portion—on receiving all commercially available telecommunications services and basic conduit access to the Internet. However, expanding eligibility to other non-transport services is counter-productive to advancing access to advanced services for libraries and schools. On the one hand, allowing the eligibility for more services may seem very enticing to libraries and schools who are facing severe budget cuts. On the other hand, we must question whether doing so is consistent with the statutory requirement to ensure that **universal access to advanced services** for schools and libraries is achieved.

***(12f.) Costs not Currently Covered Under the E-rate Program That Will be Incurred if Schools and Libraries Could Purchase Additional Bandwidth Services***

Upgrading routers and switches to effectively distribute capacity over internal local area networks (LANs) may be required to further support effective and efficient use of additional bandwidth services. Although these products are technically “eligible” under E-rate, in reality, given that there are insufficient funds to support Priority Two services, these costs typically fall to the local entities unless purchased as part of on-premise Priority One end-to-end services. Other building modifications such as electrical upgrades will continue to be required.

***(12g.) Coordinating with federal or state agencies on grant programs that could supplement the Commission's E-rate program***

We believe that leveraging the capabilities of different state and federal programs to create technology-related outcomes is currently taking place. This is true in those states where state universal service funds are used to assist with the non-discount portion of E-rate, through Library Services and Technology Act (LSTA) funding where the potential exists to buy computers and assist with staff development and also through the U.S. Department of Education's Enhancing Education Through Technology (EETT) program. In many cases, especially within state level programs, entities are required to participate in E-rate before they can receive other funds. We do not believe federal coordination, which could cause further complexity and delays, is required.

***(12h.) Specific ways in which the Commission could better leverage the benefits of E-rate funding through coordination with other federal, state, local or non-profit programs that seek to advance broadband deployment?***

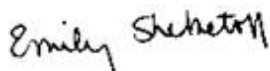
What is needed is a predictable flow of funding for schools and libraries without having to jump through additional hurdles to obtain funds. Focusing on ways in which to make the E-rate program less complex would benefit all schools and libraries. A permanent exemption to the Anti-Deficiency Act requirements is also necessary. **Predictability** and **sustainability** are key factors in making a substantive and ongoing difference in accessing needed services.

***(12i.) Ideas to Increase Funds or more Effectively Use E-rate Funding***

Apart from the specific recommendations in our comments, we call for stability in the E-rate program. The past twelve years of program history have shown that political controversy and constant administrative change create confusion among applicants, declining program participation, and major delays in the application and disbursement process. E-rate must be a stable and predictable source of funding adjusted for both need and inflation. The Commission should place a priority on achieving this goal in order to advance access to telecommunications and information services for libraries and schools.

Thank you for considering our comments.

Respectfully submitted,



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